3	Application No.	Applicant(s)	
Notice of Allowability	10/541,452	ASAFUSA ET AL.	
	Examiner	Art Unit	
	Joel M. Lamprecht	3737	
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this apport or other appropriate communication GHTS. This application is subject to	plication. If not include will be mailed in due	ed course. <b>THIS</b>
1. X This communication is responsive to <u>RCE filed 11/5/07</u> .			
2. The allowed claim(s) is/are <u>1-20</u> .			
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority una)  All b)  Some* c)  None of the:  1.  Certified copies of the priority documents have 2.  Certified copies of the priority documents have 3.  Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.</li> <li>4.  A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give 5.  CORRECTED DRAWINGS ( as "replacement sheets") must (a)  including changes required by the Notice of Draftspers 1)  hereto or 2)  to Paper No./Mail Date</li> </ul>	e been received. e been received in Application No cuments have been received in this of this communication to file a reply IENT of this application.  itted. Note the attached EXAMINER es reason(s) why the oath or declara at be submitted. con's Patent Drawing Review ( PTO-	national stage application of the record of	quirements
(b)  including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1	.84(c)) should be written on the drawir	ngs in the front (not the	back) of
each sheet. Replacement sheet(s) should be labeled as such in the deposit of and/or INFORMATION about the deposit of the depos	,	•	Note the
attached Examiner's comment regarding REQUIREMENT	FOR THE DEPOSIT OF BIOLOGIC	AL MATERIAL.	
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)		• •	,
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	Paper No./Mail Dat 7.  ☐ Examiner's Amendr	te	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. Examiner's Statement of Reasons for Allowance 9.  Other		

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## **DETAILED ACTION**

## Allowable Subject Matter

Claims 1-20 are allowed.

1. The following is a statement of reasons for the indication of allowable subject matter: As previously stated, in regard to the independent claims, the primary reason for allowance of the claims is the inclusion of a modulation and demodulation sequence in combination with a synthesis sequence and precise reverse order coding contrasting during the first encoding step and the second encoding step. The closest references found teach a method that includes multiple steps of modulation and demodulation and production of multiple ultrasonic representations given a signal, but fail to describe sequentially modulating with multiple codes of which at least two are in compliment with each other in multiple sets of transmissions and then using a basic wave output demodulated by a reverse encoding set to be used in the production of a third synthesis signal (a combination of the first and second) through another synthesis step. This would allow for the drive signal to provide a new method to account for body motion when time variances exist in multiple signals in different directions, specifically the occasion where a motion occurs in a repeatable, rhythmic, cyclical motion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on the Statement of Reasons for Allowance".

## Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel M. Lamprecht whose telephone number is (571) 272-3250. The examiner can normally be reached on Monday-Friday 7:30AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JML 11/7/2007

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